




UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------|------------------|
| 09/735,149 | 12/12/2000 | Nikolai Nefedov | 297-009990-US(PAR) | 4688 |
| 7590 | 02/08/2005 | | EXAMINER WONG, BLANCHE | |
| Clarence A. Green Perman & Green 425 Post Road Fairfield, CT 06430 | | | ART UNIT 2667 | PAPER NUMBER |

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--|--------------------------------------|--|--|
| <p align="center">Office Action Summary</p> | Application No. 09/735,149 | Applicant(s)  NEFEDOV, NIKOLAI | |
| | Examiner Blanche Wong | Art Unit 2667 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,12,15 is/are rejected.
- 7) ☒ Claim(s) 3-11,13,14 and 16-28 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear whether "said signal received during a time slot" in ln. 7 refers to "a signal for the whole duration of a time slot" in ln. 4 or "a signal received during a time slot" in ln. 5.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. **Claims 1,2,12,15** are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Lucent Technologies Inc (EP 0 980 153 A2, as provided by applicant).

With regard to claim 1, Lucent discloses a method for conveying information of users (multiplexing communication connections) (col. 1, ln. 17-22) in TDM (telecommunication system based on time division multiple access) (col. 1, ln. 27-40)
The method comprises the steps of:

- defining a burst structure (603,604 in Fig. 6) that consists of symbols (col. 9, ln. 25) and fills a time slot (In TDM, it is inherent that frames comprises timeslots (col. 1, ln. 31-32).) at a radio interface,

- filling the burst structure (603,604 in Fig. 6) with symbols (A frames has six SYNC fields (col. 9, ln. 14). A SYNC field contains 14 symbols (col. 9, ln. 25).), thus composing a transmission burst (603,604 in Fig. 6), and

- transmitting the transmission burst with a time slot (603 of U1 in Fig. 6);

wherein the step of filling the burst structure with symbols comprises the substeps of:

- taking information symbols (first DATA | D1 in 603) of a first kind and filling a first part of the burst therewith,

- taking information symbols (second DATA | D1 in 603) of a second kind and filling a second part of the burst therewith and

- taking control symbols (signaling information, col. 9, ln. 22-23 and ln. 34) and filling certain control parts (PLT) of the burst therewith.

With regard to claim 2, Lucent also discloses a base station to mobile stations (Fig. 1) and co-shared downlink frame format (col. 9, ln. 11) and co-shared subslot configuration (col. 9, ln. 21) (separating different downlink transmission) comprises the steps of:

- taking information symbols (first DATA | D1 in 603 in Fig. 6) belonging to a first downlink communication connection between said base station and a mobile station and filling a first data field in the burst therewith, and

-taking information symbols (second DATA | D1 in 603 in Fig. 6) belonging to a second downlink communication connection between said base station and a mobile station and filling a second part of the burst therewith.

With regard to claim 12, it is inherent that there is a burst formatter and means for providing the burst formatter in order to create the transmission burst with data structure such as 603 or 604 in Fig. 6. It is also inherent to receive successful, as oppose to unsuccessful, information symbols.

With regard to claim 15, in a typical scenario in a TDMA system (col. 1, ln. 41-42) with two mobile equipment 100,112 in Fig. 1, where one of the two mobile equipment is a transmitter of bursts with data structure such as 603 or 604 (claim 12), the other of the two mobile equipment is the receiver. Therefore, it is inherent that there is a burst decomposer and means for separately attempting the decoding of different sequences of information symbols extracted from a transmission burst. It is also inherent to receive successful, as oppose to unsuccessful, information symbols.

Response to Arguments

5. Applicant's arguments filed July 16, 2004 have been fully considered but they are not persuasive.

Applicant argues that the claims reads "the use of two different kinds of data symbols to occur in a single burst. Remark, p. 18, para. 2. However, a timeslot or subslot has no structure and is an amount of time used to transmit a data burst. A burst in the Lucent reference is a data structure such as 603 or 604 in Fig. 6.

Art Unit: 2667

Applicant asked the Examiner to show a teaching of "mixing two kinds of data symbols into a single burst." Remark, p. 19, para. 1. There are the first and second DATA | D1 in burst structure 603 in Fig. 6 in the Lucent reference.

Allowable Subject Matter

6. Claims 3-11,13-14,16-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

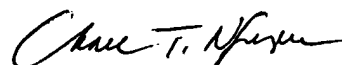
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

BW
February 2, 2005



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600